

## Forensic Linguistics

Roger W. Shuy

Georgetown University

In Aronoff, Mark and Janie Rees-Miller, eds., *The Handbook of Linguistics*. Oxford: Blackwell, 2001, pp. 683-691

It's hard to imagine any area of life that linguistics does not touch. We usually think of language teaching or language learning but for decades now linguists have also extended their work to such areas as medical communication, advertising, and, even more recently, to the intersection of law and language. Law had received previous attention from anthropologists, psychologists, sociologists and political scientists but now linguists also have begun examining such matters as voice identification, authorship of written documents, unclear jury instructions, the asymmetry of power in courtroom exchanges, lawyer-client communication breakdown, the nature of perjury, problems in written legal discourse, defamation, trademark infringement, courtroom interpretation and translation difficulties, the adequacy of warning labels, and the nature of tape recorded conversation used as evidence (Levi 1994).

Although a good case could be made for simply calling this practice *applied linguistics*, the term, *forensic linguistics*, began to be used commonly in the eighties and by now appears to be the established name for this area of study. By the nineties, forensic linguistics had established its own academic organization, The International Association of Forensic Linguistics, its own journal, *Forensic Linguistics*, a growing number of books and articles, and an increasing number of linguists doing the work. Since *forensic* is commonly defined as dealing with the application of scientific knowledge to other areas, the term seems fitting enough.

### Trademark Infringement

So what do forensic linguists do? Typically, they respond to requests of attorneys to help them with their law cases. For example, a lawyer may have a law suit involving a trademark dispute. One company may feel that another company's trade name is too much like its own. The more generic or descriptive the name, such as *Raisin Bran* or *Beer Nuts*, the less likely such a name can be protected against use by other companies. The more unique or fanciful the name, such as the coined words, *Kodak* or *Xerox*, the more likely such protection will be.

It's the names that fall between descriptive and fanciful that find their way to litigation. The law refers to such categories as

"arbitrary" and "suggestive." Arbitrary trade names are non-fanciful words in common use but, when used with goods and services, neither suggest nor describe the ingredients, quality or character of those goods or services. The trade names, *V-8* (juice), *Ivory* (soap), and *Royal* (baking powder) are commonly used as examples of arbitrary trade names. Suggestive trade names are also usually words in common use, non-descriptive of the product's purpose or function, but suggesting some quality not indicated by the name itself. The trade names, *Camel* (cigarettes), *Shell* (gasoline), and *Arm and Hammer* (baking soda) are commonly used to illustrate suggestive trade names.

The burden of proof is on the allegedly offended party to show that the other party's name looks like, sounds like, and means the same as their own. To a linguist, "sounds like" obviously suggests phonology, "looks like" suggests graphology, and "means the same" suggests semantics. And this is why linguists are called upon to analyze and present their findings in trade mark cases.

### **Product Liability**

Forensic linguists are also being called in product liability law suits. It may seem surprising that linguistics has anything to do with a contention that a product has caused injury to a consumer. But suppose an attorney has a product liability law suit in which a person has suffered physical harm alleged to have been caused by inadequate package instructions or warning labels. A linguist is called upon to analyze the language of the warning label to determine whether or not the warnings follow the guidelines of the relevant regulatory agency and whether or not they are clear, unambiguous, and optimally effective. For example, does a manufacturer meet the U.S. Food and Drug Administration's required warning to show that "tampons are associated with Toxic Shock Syndrome" when it labels its package insert warning with the words, "Important Information About Toxic Shock Syndrome (TSS)." (Shuy 1990). Does "important information about" meet the FDA requirement to be "associated with"? Does the fact that the warning finally makes this explicit association in the middle of the warning label satisfy the government regulation that this warning must appear "prominently" and in "terms understandable by the layperson?" Does the fact that the warning part of the insert averages 19 words per sentence while the "instructions for how to use" section averages 9.4 words per sentence suggest that the insert writer really knows how to write more readable sentences but chooses not to in the "warning" section?

The forensic linguist, of course, can get into the mind of neither the warning label writer nor the consumer who reads it. That is, the linguist cannot know the intentions of the writer or the actual comprehension of the reader. But the linguist, calling on knowledge of discourse analysis, semantics and pragmatics, can determine the extent to which the message was clear and unambiguous and point out the possible meanings that the message presents. Once this is done, it is up to the attorney to determine whether or not to ask the linguist to testify at trial.

### **Speaker Identification**

Linguists have been used by attorneys in matters of voice identification perhaps longer than in most other areas of legal dispute (Hollien 1990; Tosi 1979). For example, suppose a caller leaves a threatening message on an answering machine. The receiver of this message then takes the recording to an attorney or to a law enforcement agency. A linguist may be called upon to try to help identify the speaker, using only the characteristics of that voice in comparison with tape recordings of voices of various potential suspects. If the tapes are of sufficient quality, spectographic analysis is possible. If not, the linguist may rely on training and skills in phonetics to make the comparison (Baldwin and French 1990).

Several problems with such analysis have been posed. For one thing, spectographic analysis is not allowed in some courts. But even when it is allowed, it usually requires suspects to read the original phone message in order to produce exactly comparable words for analysis. Some argue that a reading voice is not the same as a talking voice. Others argue that the readers, having been alerted to their status as suspects, may try to alter their normal speech patterns. On the other hand, juries tend to be impressed with analysis based on electronic equipment rather than on an individual linguist's phonetic judgment, however expert that linguist might be.

In some voice identification cases, the linguist has used both spectographic and articulatory phonetic expertise to show that a suspect was not, indeed, the guilty party. For example, in one such case, the vowels of a suspect were shown to be characteristic of an entirely different dialect area than those of the person on the message machine tape, resulting in the suspect's acquittal. In this case, spectographic analysis was used to support the linguist's skills in auditory phonetics (Labov 1988).

## Authorship of Written Documents

Written documents also serve as data for forensic linguistics. In many cases, for example, threats exist in written form. Law enforcement agencies process hundreds of these every year, often calling on the expertise of psychologists to provide what they call a "psychological profile" of the person who sent the message. In fact, the U.S. Federal Bureau of Investigation has a profiling unit at its Quantico, Virginia academy. It is only recently, however, that this agency has begun to call on linguists to add the dimension of linguistic profiling to their analyses. Such profiling has two parts. Calling on their knowledge of language indicators of such things as regional and social dialect, age, gender, education, and occupation, linguists analyze documents for broad clues to the identity of the writer. Linguists also provide stylistic analysis of such writings, usually by comparing the document's style with those of other documents written by possible suspects (McMennamin 1993). Stylistic analysis centers on a writer's habitual language features over which the writer has little or no conscious awareness, such as patterns of clause embedding, use of parallel structures, deletion of "that" in that complementizer constructions, mechanical errors, punctuation, discourse features and organization, and print features such as underlining, bolding or italicizing.

It should be pointed out that linguistic profiling has been most effectively used to narrow down a suspect list rather than to positively identify a suspect. This is not to say that such positive identification is impossible but, rather, that the potential for variability in language use is great and the texts offered for comparison are sometimes dissimilar in genre, register and size.

When anonymous writers attempt to disguise their prose style, such effort usually involves the more conscious aspects of language use rather than the major features analyzed in the linguistic profile. For example, one set of threat notes recently analyzed linguistically contained expressions such as, "She will finally the seriousness of the problem recognize," "I will not give warning," "You can be transferred to better position," and "If I address it her." These and other expressions suggested the influence of Hindi-Urdu English interference. Such a speaker might be expected to place the verb at the end of the English sentence and omit articles and pronouns. Other language expressions, such as "I will take the proper course" and "she was in hospital at the time," pointed to a person educated under the influence of British English. These threat letters were written in several different handwriting styles, apparently in an

effort to disguise the writer's identity. Nevertheless, some defining characteristics came through and were used by the law enforcement agency to identify the culprit.

## **Criminal Cases**

The above are examples of how a forensic linguist is used in civil cases and in document analysis. But technological advances with recording equipment have opened the door also to criminal cases. Since the late seventies, law enforcement agencies have used tape recorders to capture criminal activity in progress. Suspects are either recorded with court authorized wire taps placed in such a way that none of the speakers is aware of being taped, or by using undercover agents who wear body microphones and engage suspects in conversation. Court authorization is not required for surreptitious body mike recording in the U.S. American law regarding surreptitious telephone taping varies between jurisdictions, some requiring the consent of only one of the parties (obviously, the one doing the taping). Other jurisdictions prohibit the practice altogether unless both parties consent.

The linguist can be brought into a case either by the prosecution or the defense. If the law enforcement agency is concerned about the adequacy of the language evidence that they have gathered, they may call on a linguist to make (or correct already existing) transcripts of the conversations, analyze them and determine whether or not the agents' representations of illegality have been made clearly and unambiguously and whether or not the target has clearly suggested or agreed to the illegal act. If the defense attorney calls on the linguist, the same issues are central.

In transcript preparation, forensic linguists use the tools of their trade, depending on the specific task. The transcript task requires a good ear, access to good listening (and/or viewing) equipment, and knowledge of language variation, syntax, semantics, and phonology. It is amazing how difficult it is to produce an accurate, jury-ready transcript. In fact, major legal battles sometimes ensue about the differences between transcripts prepared by the prosecution and those made by the defense.

Once the tape recorded evidence is gathered and the suspect is indicted, copies all tapes must be turned over to the defense as part of what is called "discovery." As soon as it is reasonably possible, the prosecution is then required to make written transcripts of the recordings and turn them over as well. In most cases, this turning

over of evidence occurs well in advance of the trial, so that the defense can prepare for it.

The first step for the linguist is always to ensure that the transcript is accurate. The jury will indeed hear the tape but it is commonplace for the court to provide juries with a transcript in order to make their task easier. But people remember what they see much better than what they hear and transcripts become very important for this reason alone. In any case, surreptitious conversations recorded by body microphone are usually very difficult to hear. They are often taped in restaurants, bars, automobiles, and under conditions that do not promote easy hearing for later listeners. If the government transcript has a person saying "I'd wanna do it," for example, when the words are actually, "I don't wanna do it," serious jury misperception may occur.

It is not always clear just exactly how transcripts are produced but it appears that the government usually employs an office secretary or a court reporter to make it, then has the participating undercover agent review the transcript and correct perceived errors. When the defense makes a transcript, the same general procedure obtains, except that the reviewing and correcting is done by the defendant. The objectivity of such reviewing is, at best, suspect, since the schemas of participants sometimes cause them to think they hear something that is actually not on the tape at all. An outsider to the case, such as a linguist, does not (or should not) carry such schema or bias.

The tape recorded conversation itself points to the use of the other tools of the forensic linguist, including syntax, morphology, semantics, pragmatics, dialectology, and discourse analysis. The use of such analyses can give linguistic lay persons, such as juries, scientific reasons for their perceptions, opinions or feelings that might otherwise be ungrounded. Likewise, such analyses can help lay persons see patterns of language use that are visible only through the help of forensic linguists. Just as medical experts are used to describe and define what is on an X-ray, so linguistic experts describe and define what is in a tape recorded conversation.

Grammatical referencing is often unclear in everyday language and unless the reference that the prosecution believes to be critical is actually clear, the prosecution's case may fail. In one criminal case in which a defendant was charged with agreeing to purchase narcotics for resale in order to make enough money to save his company from bankruptcy, the following utterance was considered central to the prosecution's case (Shuy 1993):

Undercover agent: What do you think about investment?

Target: I think investment would be a good thing. The law enforcement officer thought that the target had thereby agreed to invest his remaining assets into the illegal drug scheme proposed by the agent. In thinking this, however, the agent overlooked the fact that six months of tape recording this target had clearly failed to elicit anything illegal. To that point, in fact, the agent had continuously offered the target two potential avenues of action. One was to help find the target some investors who might purchase stock in the target's company. The second was to get the target to pyramid his remaining assets by investing in a drug scheme, then selling the cocaine quickly for a large, quick profit. The target had said neither yes nor no, obviously not wanting to erase the potential of getting stock investors if he should say no to the drug scheme. In fact, the target was no clearer than the agent about what investment meant here. Neither had specified the defined referent to which "investment" could be associated.

In cases of ambiguity such as this, the prosecution's decision whether or not to indict is normally deferred until more unambiguous statements are elicited. In this particular case, the government's intelligence analysis was faulty. An indictment was made on the assumption that the target had actually agreed to invest in the drug scheme. At trial, the defendant was acquitted, thanks at least partially to the assistance of the forensic linguistics in this case. Discourse analysis is another important tool used by forensic linguists, especially in cases involving tape recorded conversations. The study of topic introduction and recycling, for example, provides a good clue to the agenda or intentions of a speaker. As noted earlier, the linguist cannot know for sure what the speakers' intentions really are, but a careful examination of the topics they bring up gives a useful snap-shot of what they are thinking about, what is foremost in their minds and, perhaps even more important, what is not on their minds. Likewise, a careful analysis of the responses that given persons make to the topics introduced by others offers a similar clue to their agendas and intentions. If persons either agree or disagree, the evidence is pretty clear. But if they change the subject or say nothing at all about it, they offer indication that this topic was not to their liking, that they are not interested in it, or that they are politely side-stepping it. It is when the respondent offers only feedback markers such as "uh-huh" to another person's topics that law enforcement agencies become confused. Many times, the prosecution tends to consider "uh-huh" to be agreement or understanding when, in fact, it is only a feedback marker used to indicate that the listener is still listening

but not necessarily agreeing, that he or she doesn't really understand the gist of the topic but will hear it out anyway, or that he or she is not really listening at all but is making polite social noises.

It is common for recorded conversation used as evidence in criminal cases to contain examples of feedback markers that the prosecution erroneously attributes to understanding and agreement. In one recent example, an undercover agent tried to elicit agreement from his boss that a commission paid to a consultant violated government regulations. The situation was complex, since this consultant was at the same time receiving perfectly legal commissions from another unrelated source. The portion of their conversation that the prosecution considered inculpatory was the following:

Undercover Agent: Ari's calling me every day...He's worried, I guess, about his payment, his commission.

Target: Uh-huh.

The target's "uh-huh" can legitimately agree that Ari is worried about getting his commission but, since there is no specification about what this commission is for or who it is from, there is nothing here that would indicate that he agrees that this commission is from the target's company. Nor is there anything in the conversation to indicate that the target is even interested in Ari's problems about getting this commission, wherever it was from. Further complicating this exchange is the fact that the undercover agent has been a general nuisance by spending far too long updating his very busy boss with somewhat trivial information. It is even possible that the target's "uh-huh" was the polite noise making type that had nothing to do with his understanding or agreement.

Armed with the forensic linguist's analysis of this passage, the attorney presented it at trial himself. Perhaps the best help a forensic linguist can give an attorney is to make the analysis so clear that it does not need to be presented by an expert witness.

## **The Future of Forensic Linguistics**

There are many other areas of forensic linguistics in addition to the ones cited above. For example, considerable work has been done on the problems of producing clear jury instructions (Charrow and Charrow 1979; Elwork et al 1982). Before the jury retires to deliberate, the judge reads a list of instructions that are intended to guide them in arriving at their verdict. Linguists have found that such instructions are sometimes incomprehensible to the jurors.



When the jury sends out a note requesting clarification, the same instructions are sometimes meely re-read. The field of law walks a fine line here, trying to translate the language of law into the language that laymen can comprehend without creating a reversible error than will lead to retrial. It is a classic case of a problem with the bureaucratic language of law. Such language may be appropriate and necessary within law but, like all specialized language, faces problems when trying to communicate outside its own province.

Likewise, some forensic linguists are concerned about the asymmetry of power in the courtroom (O'Barr 1982; Lakoff 1990). At trial, language power clearly resides with the court and the attorneys. The testimony of witnesses is controlled by a rigid question-answer format which enables the attorneys to structure the sequence and content of what is said. However useful or necessary this may be for trials, it runs counter to non-lawyer's natural, normal use of language. It prevents them from bringing up their own topics or telling their story in their own way. They run a serious risk of not getting out what they want to get out. They are vulnerable to being considered ineffective or even untruthful by their manner of speech, fettered as it is by courtroom constraints. One of the most frustrating experiences reported by lay witnesses is that they are forced to answer "yes" or "no" to questions for which neither answer is complete or adequate.

The attorneys' power of language and the witnesses' lack of power is the subject of much recent analysis, including the language used by judges (Phillips 1985; Solan 1993) and the language of the trial itself (Stygall 1994). It is also common that defendants, plaintiffs, or witnesses in court are not native speakers of English. This poses a serious problem for such people as well as for the attorneys and the court (Berk-Seligson 1990). In recent years, forensic linguists have begun to address this issue as well and some courts are now providing interpreters when it is deemed necessary. The U.S. federal Court Interpreters Act of 1978 (and its trickle down effect on state and municipal courts) was designed to avoid denying the constitutional rights of the non-English speaking and hearing impaired in the American court system. However worthwhile and necessary such action is, a multitude of problems remain. How do we best recruit and train such interpreters? How is it possible to provide such services for all possible languages for which there is need? How do we know the extent to which a non-English speaker has mastered enough English to go to trial in English only? Further complications come from the linguistic naiveté of some courts in

these matters. For example, when undercover tape recordings are made in Chinese or Spanish, the courts frequently hire a translator to provide an English translation of the conversations and then to present that translation as the evidence. What is missing here is the essential middle step, providing first a transcript of the conversations in the other language upon which the translation is based. The same errors in transcript preparation noted earlier can easily occur here as well. Without the intermediate transcript in the other language, dispute over accuracy of the translation is eliminated. Going straight to the translation without first providing a transcript may be time and cost efficient but it is linguistically naive, if not dangerous. Forensic linguists have been trying to make this point to the courts in recent days. Interpreting for the hearing impaired provides even further complications, since, for example, American Sign Language does not easily translate into neat English sentences.

In criminal cases, forensic linguists continue to apply their knowledge of speech acts to significant issues involving offers, promises, denials, and agreements found in tape recorded evidence. They also examine confessions elicited through police interrogation, in an effort to make clear what, if anything, was actually confessed and whether or not that alleged confession was tainted by the manner in which it was elicited. More and more law enforcement agencies are recording such confessions in order to guard against accusations of undue pressure or improper promises. Such tapes make it possible for forensic linguists to apply their skills for either the prosecution or the defense (Shuy 1998).

In summary, the future of forensic linguistics appears to be very promising indeed. In the United States, more and more courts permit forensic linguists to testify as experts at trial (Wallace 1986). In the few criminal cases in which judges have ruled that forensic linguists' testimony would not be permitted, the reason given was often based on an attorneys' representations of what those linguists might say rather than on the reputation and respectability of the field of linguistics or the linguists themselves. But whether the linguist testifies or not, it is clear that more and more attorneys and government agencies are calling on forensic linguists to assist them in analyzing the spoken and written language that frames the evidence in both civil and criminal law suits. It is also the case that more and more universities are offering courses on topics of language and the law.

## References Cited

- Baldwin, John and Peter French. 1990. *Forensic Phonetics*. London: Pinter.
- Berk-Seligson, Susan. 1990. *The Bilingual Courtroom: Court Interpreters in the Judicial Process*. Chicago. University of Chicago Press.
- Charrow, Veda R. and Robert P. Charrow. 1979. Making legal language understandable: a psycholinguistic study of jury instructions. *Columbia Law Review* 79, 1306--74.
- Hollien, Harry. 1990. *The Acoustics of Crime*. New York: Plenum.
- Labov, William. 1988. The judicial testing of linguistic theory. In Deborah Tannen (ed), *Linguistics in Context: Connecting Observation and Understanding* (pp. 159--82). Norwood, N.J.: Ablex.
- Lakoff, Robin. 1990. *Talking Power: The Politics of Language*. New York: Basic Books.
- Levi, Judith N. 1994. *Language and Law: A Bibliographic Guide to Social Science Research in the U.S.A.* Chicago: American Bar Association.
- McMenamin, Gerald R. 1993. *Forensic Stylistics*. Amsterdam: Elsevier.
- O'Barr, William. 1982. *Linguistic Evidence: Language, Power and Strategy in the Courtroom*. New York: Academic Press.
- Phillips, Susan U. 1985. Strategies for clarification in judges' use of language: from the written to spoken. *Discourse Processes* 8, 421--36.
- Shuy, Roger W. 1990. Warning labels: language, law and comprehensibility. *American Speech* 65, 291--303.
- Shuy, Roger W. 1993. *Language Crimes*. Oxford: Blackwell.

Shuy, Roger W. 1998. *The Language of Confession, Interrogation and Deception*. Thousand Oaks, CA: Sage.

Solan, Lawrence M. 1993. *The Language of Judges*. Chicago: University of Chicago Press.

Stygal, Gail. 1994. *Trial Language: Differential Discourse Processing and Discursive Formation*. Amsterdam: John Benjamins.

Tosi, Oscar. 1979. *Voice Identification: Theory and Legal Applications*. Baltimore: University Park Press.

Wallace, William D. 1986. The admissibility of expert testimony on the discourse analysis of recorded conversations. *University of Florida Law Review* 38, 69--115.